The Aſplenium ceterach, Aſplenium ruta-muraria, Aſplenium adiantum nigrum, Polipodium fragile, Polipodium thelypteris, and Polipodium fontanum, in the laſt ſtages of their growth, become Acroſticha.

In Oſmunda, whoſe character is to have the ſeed-veſſels diſpoſed in bunches of ſpikes at the extremities of the rib of the fertile leaves, we find the Oſmunda ſpicant, whoſe ſeed-veſſels are diſpoſed in lines along the under ſide of the lobes, of the fertile leaves; and the Oſmunda criſpa, in which they are placed in lines under the verges of the lobes, which are gently rolled back upon them as in the Pteris aquilina.

It muſt offend the taſte of the judicious reader to find the characteriſtics of the Genera fixed on foundations ſo unſteady, when he finds plants very diſſimilar in their appearance united; as alſo when he ſees a ſeparation take place between Oſmunda lunaria and Ophioglooſſum vulgatum, between Acroſtichum ſeptentrionale and Aſplenium ruta-muraria.

In a family of plants ſo nearly approaching in general habit, and whoſe characteriſtic notes are in nature too minute for our inſpection, there is no way of acquiring a perfect knowledge of the ſpecies, and varieties, but by making careful and repeated obſervations upon the plants themſelves, in the natural places of their growth.

In

In moſt of the Britiſh proper Ferns the ſeedling plants require a ſucceſſion of ſeaſons before they produce their fructification. The firſt year that a ſeed vegetates, it produces a ſingle leaf only, which ſeldom attains to more than one inch in height, is thin, ſemi-tranſparent, and moſt commonly entire. The ſecond year two or three are produced, one larger than the other. The third year four or five are produced; and the fourth year, more in number, proportionable to the richneſs and propriety of ſoil and ſituation.

Through this progreſs of growth, the young plants appear in various ſhapes according to the various matter and place in which they grow. When the ſeeds take root in moiſt and fertile ſoils, in ſhaded ſituations, on moſſy dripping rocks, or near currents or rills of ſpring water, they produce leaves of a thin, light, ſemi-tranſparent ſubſtance. When on dry rocks, and in barren ſoils, where they are more expoſed to the air and the ſun, the leaves are few in number, ſhort, firm, and opaque. The former plants produce larger and more numerous leaves; but the latter produce ſeeds in fewer years from the firſt ſpringing up: The firſt are apt to produce leaves monſtrous in ſhape or ſize; the laſt generally retain their own proper figure.

The difference of ſize, in conſequence of ſoil and ſituation, is as remarkable in Ferns as in any other tribe of plants. We frequently ſee leaves of Polipodium filix-mas, and Polipodium

JAMES BOLTON *Filices Britannicae (An History of the British Proper Ferns)* LEEDS, 1785–1790 CHICAGO BOTANIC GARDEN Octavo